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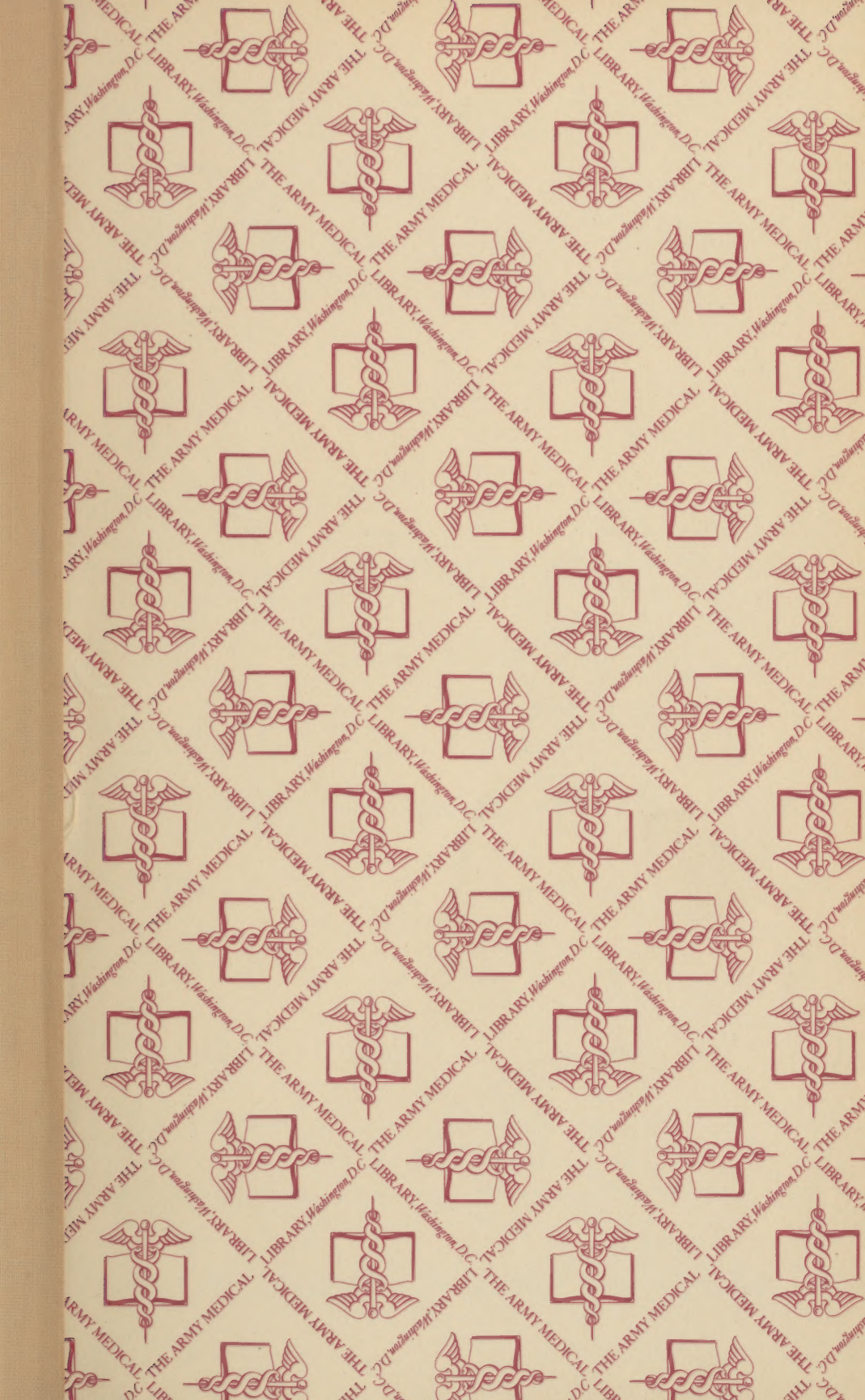
U. S. WAR DEPT TECHNICAL MANUAL 8-620

SEROLOGICAL WATER BATHS ITEMS 4479008 AND  
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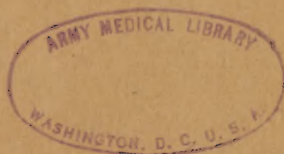
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# TM 8-620

WAR DEPARTMENT TECHNICAL MANUAL

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## SEROLOGICAL WATER BATHS, ITEMS 4479008 AND 4480008





SEROLOGICAL  
WATER BATHS,  
ITEMS 4479008  
AND 4480008



WAR DEPARTMENT • NOVEMBER 1944

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TM 8-620, Serological Water Baths, Items 4479008 and 4480008, is published for the information and guidance of all concerned.

[AG 300.7 (§ Sep 44)]

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,  
*Chief of Staff.*

OFFICIAL:

J. A. ULIO,  
*Major General,*  
*The Adjutant General.*

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For explanation of symbols, see FM 21-6.

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# CHAPTER 1

## INTRODUCTION

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### Section I. GENERAL

**1. SCOPE. a.** These instructions are published for the information and guidance of the personnel assigned to the operation of the serological water baths listed in table I, page 5. This manual is arranged in three parts: Chapter 1—Introduction; Chapter 2—Operating Instructions; Chapter 3—Maintenance Instructions.

**b.** The illustrations throughout the manual bear "key" numbers. When reference is made in the text to a part in an illustration, the "keying" number and figure number only will be given. For example: (3) figure 1, directs attention to the item having "key" number (3) on figure 1: Med. Dept. No. 4R01512, Thermometer, Range 0°–70°C.

**c.** Instructions for shipment and storage are contained in the appendix.

**d.** A list of All Service Parts is contained in the appendix. Those parts keyed with an asterisk are regularly stocked for issue as spare parts; those parts not keyed with an asterisk are available through special purchase only.

### Section II. DESCRIPTION AND DATA

**2. DESCRIPTION. a.** These baths are standard gable type water baths suitable for Wassermann or serological inactivation work.

**b.** Differences in models. See table I.

**3. DATA. Current requirement.** Voltage—110-volts, a-c or d-c.  
Amperage—A maximum of 10 amperes of current is required.

Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature
1 4R01564	Cover, Gable, 0.090 Clear Polystyrene.	4 4R01556	Well, Thermometer.	6	Dial and Knob. Component part of:
2 4441000	Test Tube Support, Wassermann Rack.	5 4R01508	Switch, Control.	7 4R01504	4R01506 Thermostat, 70°-225° F., Complete
3 4R01512	Thermometer, Range 0-70° C.				Bulb, Pilot Neon, 1 Watt, 110-V.

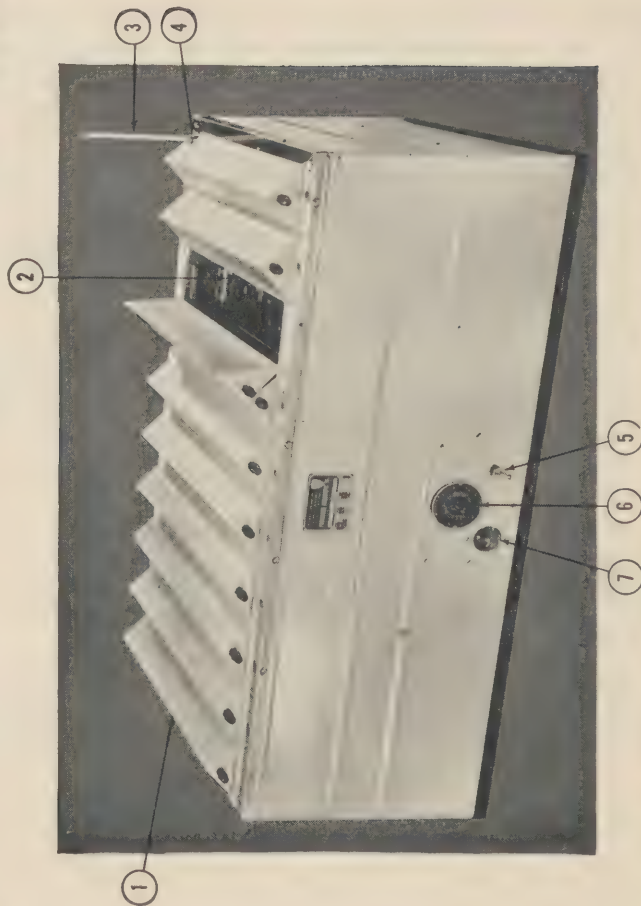
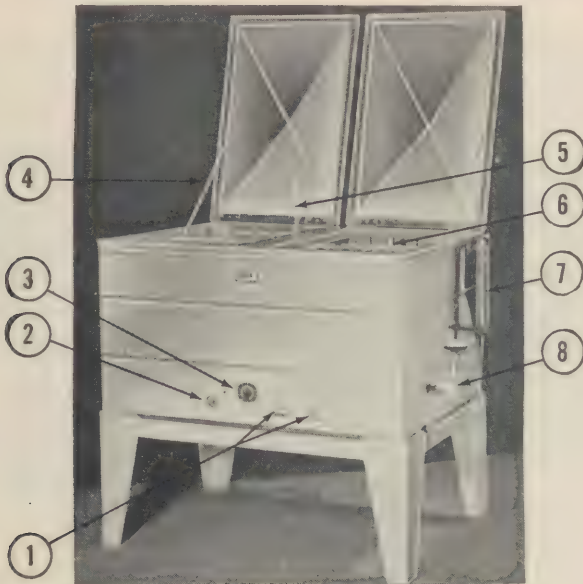


Figure 1. Item No. 4479008 water bath, serological, inactivating, 110-mlt, a-c, d-c. Precision Scientific Co.

Med. Dept. No.	Nomenclature
1 4R01508	Switch, Control.
2 4R01504	Bulb, Neon Pilot, 1 Watt, 125V.
3 4R01506	Thermostat, 70°-225°F., Complete. With knob and dial.
4 4R01606	Chain, 13½ Inches Long, Brass.
5 4R01512	Thermometer, Range 0-70°C.

Med. Dept. No.	Nomenclature
6 4441000	Test Tube Support, Wassermann Rack. Copper.
7 4R01610	Regulator, Constant Level.
8 4R01588	Draincock, ⅜ Inch.
5 4R01512	Thermometer, Range 0°-70°C.
9 4R01608	Handle, Cover, Brass.
10 4R01602	Spud, Constant Level Regulator, ⅜ Inch.



*Open view.*



*Closed view.*

Figure 2. Item No. 4480008 water bath, serological, Wassermann, 110-volt, a-c., d-c. Gotham Scientific Co.

Med. Dept. No.	Nomenclature
1 4R01220	Handle, Lid.
2 4R01218	Hinge, Lid.
3 4R01208	Thermometer, Range 5°C.-70°C.
4 4R01240	Well, Thermometer.

Med. Dept. No.	Nomenclature
5 4R01236	Switch, Control, 6 AMP, 250V.
6 4R01238	Switch, Auxiliary, 6 AMP, 125V.
7 4R01242	Draincock, $\frac{3}{8}$ Inch.
8 4R01244	Stand, Angle Iron.

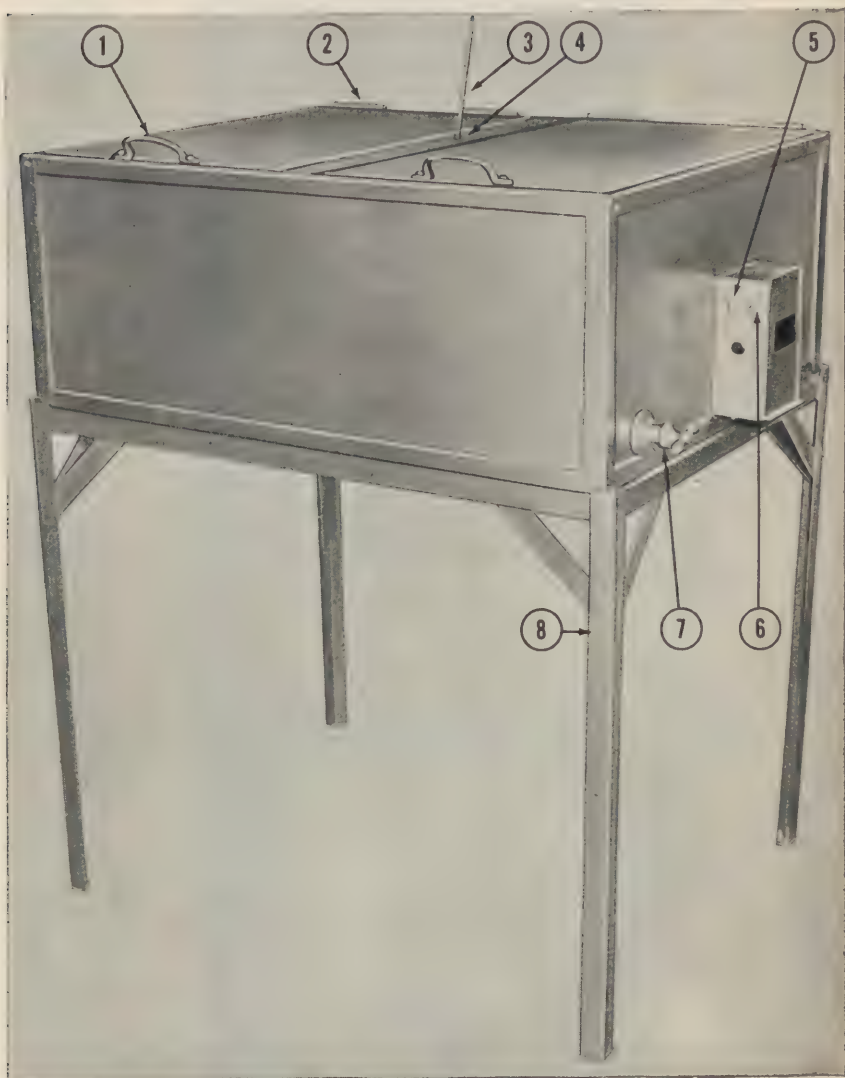


Figure 3. Item No. 4480008 water bath, serological, Wassermann, 110-volt, a-c., d-c. Gotham Scientific Co. Closed view.

Table 1. Identification and differences in models.

Figure No.	Item No.	Nomenclature and manufacturer	Inside dimensions (inches)	Thermostat adjustable for	Test tube supports	Thermometer range
1	4479008	Water bath, serological, inactivating, 110-volt, AC-DC. (Precision Scientific Company.)	33 x 10½ x 6¼	37½°-56°C	10	0°C-70°C
2	4480008	Water bath, serological, Wassermann, 110-volt, AC-DC. (Precision Scientific Company.)	31¼ x 24¼ x 12	37°-56°C	20	0°C-70°C
3	4480008	Water bath, serological, Wassermann, 110-volt, AC-DC. (Gotham Scientific Company.)	31 x 24½ x 12	37°-56°C	20	5°C-70°C

## CHAPTER 2

### OPERATING INSTRUCTIONS

---

#### Section III. GENERAL

**4. SCOPE.** Chapter 2 contains information for guidance of personnel assigned to unpack, assemble and operate the equipment.

#### Section IV. SERVICE UPON RECEIPT OF EQUIPMENT

##### **5. UNPACKING OF EQUIPMENT** (All types).

Remove the water bath from the packing crate and remove all outer wrappings. Remove the items packed inside the bath, unwrap and check them against the list given in table II.

**6. ASSEMBLING OF EQUIPMENT.** **a.** Before assembling, select a location of uniform temperature avoiding ventilator outlets, air shafts, windows and radiators. The location should permit easy leveling of the bath and be close to an electrical outlet carrying the current required by the bath. (See par. 3.)

**b.** Assembly item No. 4479008 (Precision Scientific Co.) by performing the following operations.

(1) Insert the neon pilot bulb into the receptacle in left front of bath, (19) figure 9.

(2) Apply a pipe sealing compound such as LEAD, white, basic-carbonate, type C to male threads on bibcock, (30) figure 9, and screw into the spud, located on the back near the right end of the bath, (2) figure 7.

(3) Remove the thermometer, (29) figure 9, from its case and insert it into the thermometer well, (4) figure 1, at the right rear corner of the bath. Tighten the thermometer coupling, (32) figure 9, when the thermometer has been lowered to the position where the mercury tip will be completely immersed in water, but not so far that the tip will touch the shelf at the bottom of the tank.

(4) Place the test tube supports, (2) figure 1, into the bath.

(5) Connect the ground terminal, (5) figure 7, located at the rear center near the bottom of the bath, to a water pipe or well grounded conduit system.

*Caution:* It is important to ground the equipment for the protection of the operator in case the heating element should become shorted.

**c.** Assemble item No. 4480008 (Precision Scientific Co.) by performing the following operations.

Table II. Items packed in or with each major item.

Major item No.	Nomenclature and manufacturer	Med. Dept. No.	Quantity	Nomenclature	Fig. No.
4479008	Water bath, serological, inactivating, 110-volt, AC-DC. (Precision Scientific Company.)	4441000	10	Test tube supports	1
		4R01512	1	Thermometer	9
		4R01504	1	Neon Pilot Bulb	9
		SR00311	1	Bibcock	9
4480008	Water bath, serological, Wassermann, 110-volt, AC-DC. (Precision Scientific Company.)	4441000	20	Test tube supports	2
		4R01512	1	Thermometer	9
		4R01504	1	Neon Pilot Bulb	2
		4R01588	1	Draincock	2
		4R01610	1	Constant Level Regulator	2
		4R01244	1	Stand	3
4480008	Water bath, serological, Wassermann, 110-volt, AC-DC. (Gotham Scientific Company.)	4441000	20	Test tube supports	11
		4R01208	1	Thermometer	6
		4R01234	2	Copper shelf	6

Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature
1	4R01552 Nut, Heater Compression Coupling.	2	4R01546 Clip, Heater Mounting, Rectangular.	5	4R01554 Bracket, Thermometer Holding.
	4R01550 Sleeve, Heater Compression Coupling.	3	4R01536 Clip, Mounting Thermostat Bulb, Rectangular.	6	4R01556 Well, Thermometer.
	4R01530 Coupling, Heater Compression.	4	4R01506 Thermostat, 70°-225° F., Complete. With knob and dial		

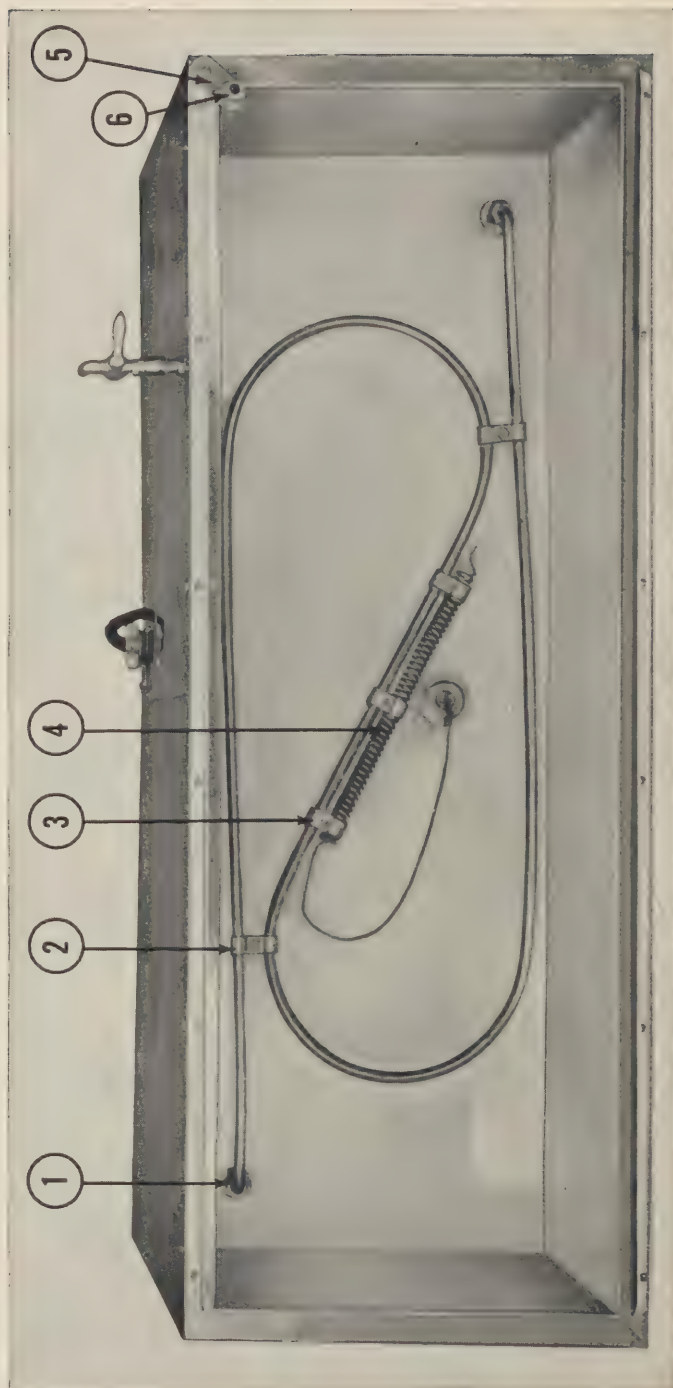


Figure 4. Item No. 4479008 water bath, serological, inactivating. Inside view.

(1) Insert the pilot lamp bulb, (10) figure 10, in the receptacle at the left front of bath.

(2) Apply a pipe sealing compound, such as LEAD, white, basic-carbonate, type C, to the male threads on the draincock, (8) figure 2, and screw into spud located in the right end near the front of the bath.

(3) Apply a pipe sealing compound, such as LEAD, white, basic-carbonate, type C to the male threads of the constant level regulator, (7) figure 2, and screw into spud, (10) figure 2, located on the right end near the rear of the bath. Remove the two screws from the bag tied to the constant level regulator and mount in the bracket at the top of the overflow. This fastens the regulator assembly to the bath.

(4) Connect the constant level regulator to a suitable water inlet and drain outlet. The water inlet is located on the side of the constant level regulator and is furnished with a hose connection. The overflow connection is located at the bottom of the constant level regulator.

(5) Remove the thermometer from its case and insert into the thermometer well on top of the center column, (4) figure 4, and tighten the thermometer coupling, (6) figure 10, after the proper height has been determined. See paragraph 6b(3).

(6) Connect the ground terminal located on the rear of the bath near the bottom to a water pipe or well grounded conduit system.

*Caution:* It is important to ground the equipment for the protection of the operator in case the heating element should be shorted.

(7) Place the test tube supports, (6) figure 2, into the bath.

**d.** Assemble Item No. 4480008 (Gotham Scientific Co.) by performing the following operations.

(1) Place shelves in the bath, (3) figure 6.

(2) Place the test tube supports on the shelves, (8) figure 6.

(3) Insert the thermometer into the thermometer well, (4) figure 3.

## **Section V. CONTROLS**

**7. CONTROLS. a.** Switches, thermostats, pilot lights and thermometers are provided to control and indicate the temperature of water in these baths. One model is equipped with a constant water level regulator. Location and action of the controls on each of the baths are given below.

**b.** Controls on Item No. 4479008 (Precision Scientific Co.) consist of:

(1) Control switch, (5) figure 1. This switch is used to turn the heater "ON" and "OFF."

(2) Thermostat, dial and knob, (6) figure 1. Turning the knob clockwise increases temperature in the bath; turning counterclockwise decreases temperature.

*Note:* Reference points on the thermostat dial do not indicate temperatures in the bath. All temperature readings must be taken from the thermometer.

Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature
1 4R01502	Element, Heating, Double Band, Complete.	5 4R01506	Thermostat, 70°-225°F., Complete. With knob and dial.
2 4R01606	Chain, 13½ Inches Long, Brass.	6 4R01536	Clip, Mounting, Thermostat Bulb.
3 4R01556	Well, Thermometer.	7 4R01546	Clip, Heater Mounting, Rectangular.
4 4R01528	Gland, Thermostat Packing, Brass.	8 4R01530	Coupling, Compression, Heater.

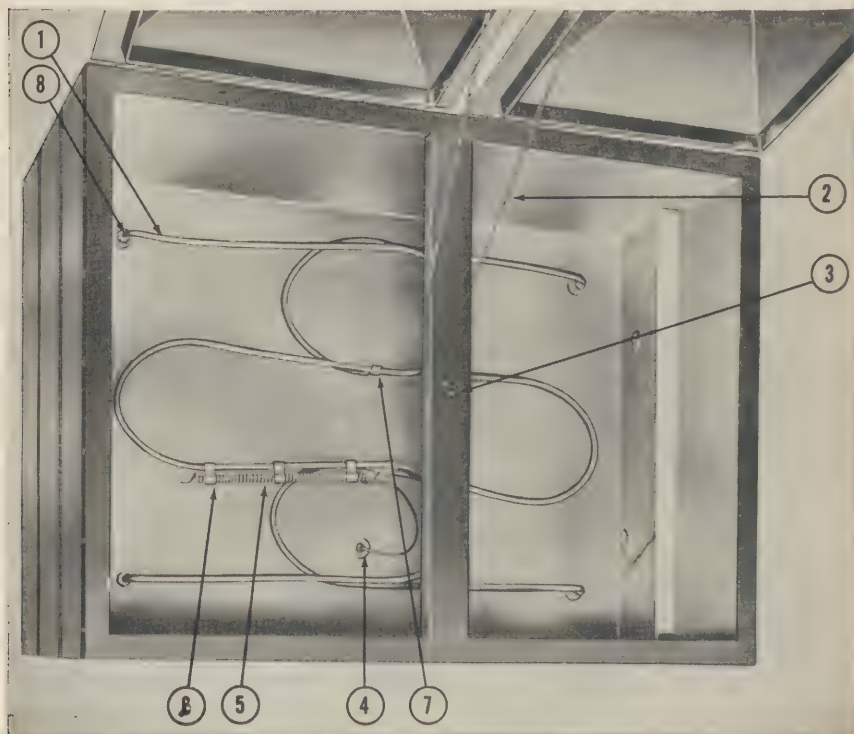


Figure 5. Item No. 4480008, water bath, serological, Wassermann, Precision Scientific Co. Inside view.

Med. Dept.  
No.

Nomenclature

- 1 SR00185 Nut, 8 x 32, Hex, Brass.
- 2 4R01216 Support, Lid.
- 3 4R01234 Shelf, Copper.
- 4 4R01206 Thermostat, Single 110V., Complete. With bimetallic bulb.

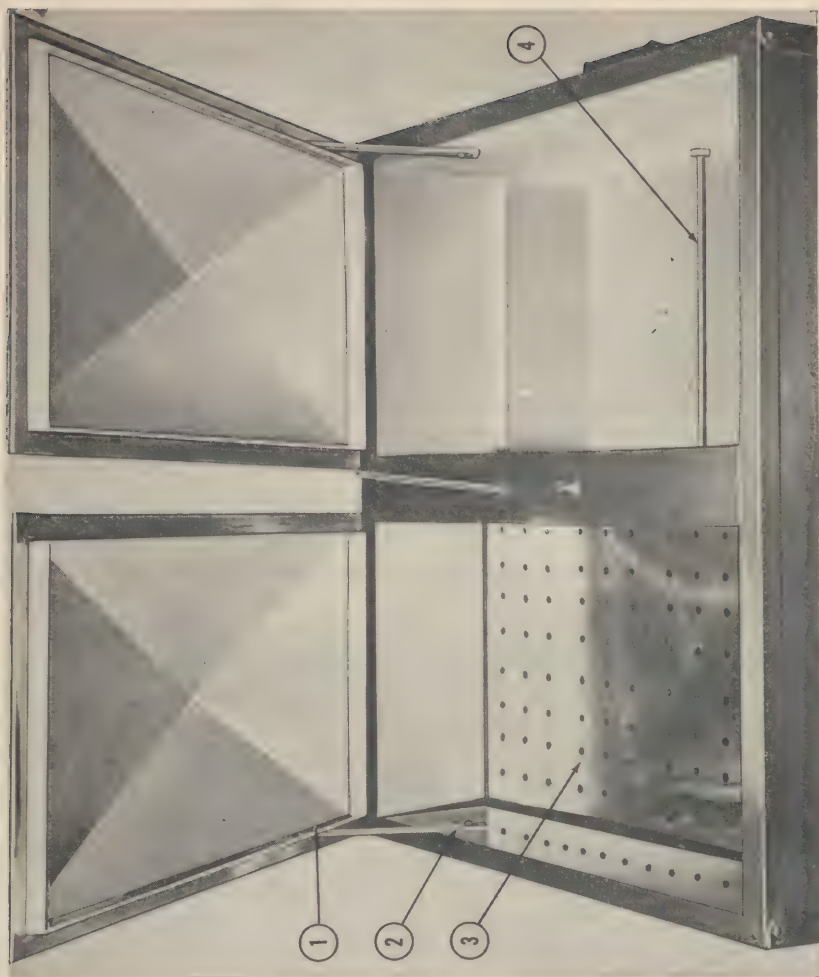


Figure 8. Item No. 4480008, water bath serological, Wassermann, Gotham Scientific Co.  
Open view.

(3) Neon Pilot bulb, (7) figure 1. This bulb is lighted only when the water is being heated by the element.

(4) Thermometer, (3) figure 1. The thermometer, graduated from 0 to 70°C, indicates the temperature of the water.

c. Controls on Item No. 4480008 (Precision Scientific Co.) consist of:

(1) Constant level indicator, (7) figure 2. This device maintains the water at the desired level. Level may be adjusted by sliding the body tube, (2) figure 10, up or down.

(2) Control switch, (1) figure 2. This switch is actually two switches, one marked "Intermittent Heat" and the other marked "Continuous Heat." "Continuous Heat" when turned "ON," is used for faster initial heating. "Intermittent Heat" is in the same circuit with the Thermostat, and when "ON," the thermostat maintains constant temperature.

(3) Thermostat, dial and knob, (3) figure 2. Turning the knob clockwise increases temperature in the bath; turning counterclockwise decreases temperature.

(4) Neon Pilot bulb, (2) figure 2. This bulb is lighted only when the water is being heated by the element.

(5) Thermometer, (5) figure 2. The thermometer, graduated from 0°-70°C, indicates the temperature of the water.

d. Controls on Item No. 4480008 (Gotham Scientific Co.) consist of:

(1) Control switch, (5) figure 3. This switch is used to turn the heater "ON" and "OFF."

(2) Auxiliary switch, (6) figure 3. This switch, marked "AUX," controls auxiliary heater elements used for faster initial heating.

(3) Thermostat and knob, (4) figure 6. Turning the knob clockwise increases temperature in the bath; turning counterclockwise decreases temperature.

(4) Pilot light bulb, (4) figure 11. This bulb is lighted only when the water is being heated by the element.

(5) Thermometer, (3) figure 3. The thermometer, graduated from 5°-70°C, indicates the temperature of the water.

## Section VI. OPERATION OF WATER BATHS

**8. GENERAL.** a. These instructions concern filling, starting heaters, regulating temperature, and stopping heaters. The techniques of serological tests are covered in TM 8-227.

b. Thermostats are the most delicate and easily damaged assemblies on these baths. Never force the adjusting knobs as this may damage the sensitive mechanism.

**9. OPERATING INSTRUCTIONS.** a. To operate Item No. 4479008 (Precision Scientific Co.) follow the steps given below:

(1) Fill with water to desired level.

(2) Turn control switch "ON." If control switch is turned on without heating element being completely immersed in water, the heating element will burn out immediately.

(3) Turn thermostat knob clockwise as far as it will go.

(4) Observe temperature of bath.

*Caution:* All temperature readings must be taken from thermometer.

(5) When temperature reaches value desired, turn knob counterclockwise until pilot light goes out.

(6) Allow temperature to stabilize. If necessary to raise temperature turn knob clockwise until pilot light comes on. If necessary to lower temperature, turn knob counterclockwise.

*Note:* Some counterclockwise movement will be required before lost motion is taken up.

**b.** To operate Item No. 4480008 (Precision Scientific Co.) follow the steps given below:

(1) Fill with water to level determined by height of body tube. See paragraph 7c(1). Secure body tube in place with rubber sleeve (4), figure 10.

(2) Turn both "Intermittent Heat" and "Continuous Heat" switches "ON." If switches are turned "ON" without heating element being completely immersed in water, the heating element will burn out immediately.

(3) Turn thermostat knob clockwise as far as it will go.

(4) Observe temperature of bath on thermometer.

(5) When temperature reaches value desired, turn "Continuous Heater" switch "OFF." Turn the thermostat knob counterclockwise until pilot light goes out.

(6) Allow temperature to stabilize. If necessary to raise temperature, turn knob clockwise until pilot light comes on. If necessary to lower temperature, turn knob counterclockwise.

**c.** To operate Item No. 4480008 (Gotham Scientific Co.) follow the steps given below:

(1) Fill with water to desired level.

(2) Turn the thermostat knob so the pointer indicates the temperature desired.

(3) Turn control switch and "Aux" switch "ON."

(4) Observe temperature of bath on thermometer.

*Caution:* All temperature readings must be taken from the thermometer, as thermostat readings are only approximate.

(5) If pilot light is still burning when desired temperature is reached, turn knob counterclockwise until light goes out. If light goes out before desired temperature is reached, turn clockwise until light comes on again.

(6) When temperature reaches value desired, turn "Aux" switch "OFF."

- 10. TO SHUT OFF HEAT AND DRAIN BATH** (All types). **a.** Turn off all switches.
- b.** Turn thermostat knobs counterclockwise as far as they will go.
  - c.** Open bibcock or drain valve and drain water.

## CHAPTER 3

### MAINTENANCE INSTRUCTIONS

---

#### Section VII. GENERAL

**11. SCOPE. a.** Chapter 3 contains information for the guidance of personnel responsible for first and second echelon of maintenance within limitations of tools and parts available.

**b.** Maintenance services or repairs beyond those prescribed in Chapter 3 should not be performed except as authorized by proper authority.

#### Section VIII. PREVENTIVE MAINTENANCE SERVICES

**12. GENERAL.** Preventive maintenance includes the systematic attention to water level and general cleanliness, the inspection of electrical leads, hose, cocks and controls to determine that they are in good condition, and the prevention of abuse to the equipment.

**13. OPERATORS PREVENTIVE MAINTENANCE. a.** These preventive maintenance services are grouped according to the attention which will be given before, during and after operation of the bath.

**b.** Before operation services (all types). (1) Determine that water is at desired level.

(2) Examine drain cocks, water hose and connections, and tank for leaks.

(3) Inspect thermometer for breakage.

(4) Make sure thermostat knob rotates freely.

(5) Inspect ground and electrical wiring for good condition and evidence of loose connections.

(6) Operate control switch, observe whether or not pilot light comes on.

**c.** During operation services (all types). (1) Observe whether pilot light flashes off and on after temperature has stabilized.

(2) Inspect for changes in water level.

(3) Watch for abnormal variations in temperature.

**d.** After operation services (all types). (1) Make sure all switches are "OFF" and thermostat is turned counterclockwise as far as it will go.

(2) Inspect sides of tank for accumulation of sediment or corrosion. Clean if necessary.

#### Section IX. TROUBLE SHOOTING

**14. TROUBLE SHOOTING. a.** The following listed possible troubles, possible causes and remedies are given to assist in determining reasons for improper operation of the baths.

**b. Water does not heat.**

*Possible cause*

Line plug not in receptacle.  
Line fuse burned out.  
Inoperative thermostat.

Heater element burned out.

*Possible remedy*

Plug into supply line.  
Replace fuse in line.  
Refer to higher echelon for replacement.  
Refer to higher echelon for replacement.

**c. Pilot light stays off and water does not heat.**

*Possible cause*

Line plug not in receptacle.  
Line fuse burned out.

*Possible remedy*

Plug into supply line.  
Replace fuse in line.

**d. Pilot light stays off but water heats satisfactorily.**

*Possible cause*

Bulb burned out.

*Possible remedy*

Replace bulb.

**e. Water level out of control.**

*Possible cause*

Adjustable tube stopped up.

*Possible remedy*

Clean.  
See paragraph 15.

**f. No control over temperature.**

*Possible cause*

Defective thermostat.

*Possible remedy*

"Continuous Heat" or "Aux"  
switch defective

Refer to higher echelon for replacement.  
Refer to higher echelon for replacement.

**Section X. MAINTENANCE OPERATIONS**

*Caution:* Before performing any repairs, remove the line cord plug from the electrical supply receptacle.

**15. CLEANING TANK, SHELVES, AND TEST TUBE SUPPORTS** (All types).

Contamination of bath water will cause dirty conditions in the tank and on shelves and test tube supports. If the tap water contains a high quantity of purifying chemicals, the bath may become seriously corroded. This condition can be avoided by using distilled water instead of tap water. If sediment cannot be removed by wiping with a clean dry cloth, SOAP, scouring powder, 1 pound, Medical Department No. 7419000, may be used.

**16. MAINTENANCE OPERATIONS ON 4479008 and 4480008**  
(Precision Scientific Co.)

*Note:* Heating elements 4R01502 for 4479008 and 4R01622 for 4480008 are alike except for the shape into which they are formed. In emergency, when the proper shaped element cannot be obtained, the other may be rebent to the proper shape using the burned out element as a sample and bending carefully about a round object of the proper diameter to prevent the tubing from collapsing.

**a.** To replace burned out heater elements. (1) Disconnect the wire leads at the heater terminals by unscrewing the hex nuts, (7) figure 7.

(2) Remove heater clips, (2) figure 4.

(3) Remove the thermostat sensitive bulb from the heater element by loosening the bulb mounting clips, (3) figure 4

(4) Loosen the heater compression coupling nuts, (1) figure 4.

(5) Lift out heater element, (1) figure 5.

(6) To reassemble, reverse disassembly procedure.

**b.** To replace pilot lamp bulb. (1) Unscrew bulb by turning it counter-clockwise.

(2) Replace with new bulb.

**c.** To replace thermostat. (1) Remove wire leads by loosening the two screws holding them.

(2) Remove the thermostat sensitive bulb from the heater element.

(3) Unscrew and remove the packing gland nut, (6) figure 7, washer, (4) figure 9, and packing, (3) figure 9.

(4) Unscrew the set screw on the bottom of the thermostat knob and remove the knob.

(5) Remove the thermostat dial.

(6) Remove the two flat head screws located under the dial.

(7) Thermostat mechanism can now be removed from the front panel.

(8) Slide the capillary tube and sensitive bulb through the packing gland (figs. 9 and 10) in the bath bottom.

(9) To reassemble, reverse disassembly procedure.

**d.** To replace heater switch. (1) Disconnect the wire leads to the switch by loosening the four screws holding them.

(2) Unscrew the hex nut on the front of the switch.

(3) Remove the "on and off" plate.

(4) Drop the switch from the front panel.

(5) To reassemble follow the reverse procedure.

## **17. MAINTENANCE OPERATIONS ON 4480008** (Gotham Scientific Co).

**a.** To replace heater elements, (1) figure 11. (1) Remove the plate of insulation from the bottom of the bath by removing the ten wing nuts, (11) figure 11, holding it in place.

(2) Remove the wire leads located under the plate of insulation.

(3) Drop the heating element from the bottom of the bath by prying the mounting plate out of its keeper first along one side then the other. Use a screw driver or similar tool for this operation.

(4) Replace with new heating element.

**b.** To replace pilot lamp bulb. (1) Unscrew the bulb, (4) figure 11, from its base.

(2) Replace with new bulb.

Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature
1	SR00311 Bibcock, $\frac{1}{8}$ Inch, Plain End, Lever Handle, Brass.	6	4R01538 Nut, Thermostat Packing Gland.	8	4R01534 Spacer, $\frac{3}{8}$ Inch O.D. x No. 16 Gage Steel
2	4R01532 Spud, $\frac{1}{8}$ Inch, Drain.	4R01540	Washer, Thermostat Packing Gland.	9	SR00305 Receptacle, Sign. 650W., 250V., Arrow-H&H., 3261. For pilot light.
3	4R01542 Connector, Cord.	4R01528	Gland, Thermostat, No. 1 Neoprene Stopper.	10	4R01506 Thermostat, 70°-225°F., Complete. With knob and dial.
4	SR00312 Cord, No. 16 Gage, Two Conductor, Moisture Resistant, Asbestos Packed.	7	4R01531 Washer, Terminal, Heater Element. SR00303 Washer, No. 10, Brass.	11	4R01508 Switch, Control.
5	4R01544 Terminal, Ground, 25 AMP.	SR00017	Nut, 8 x 32, Hex.		

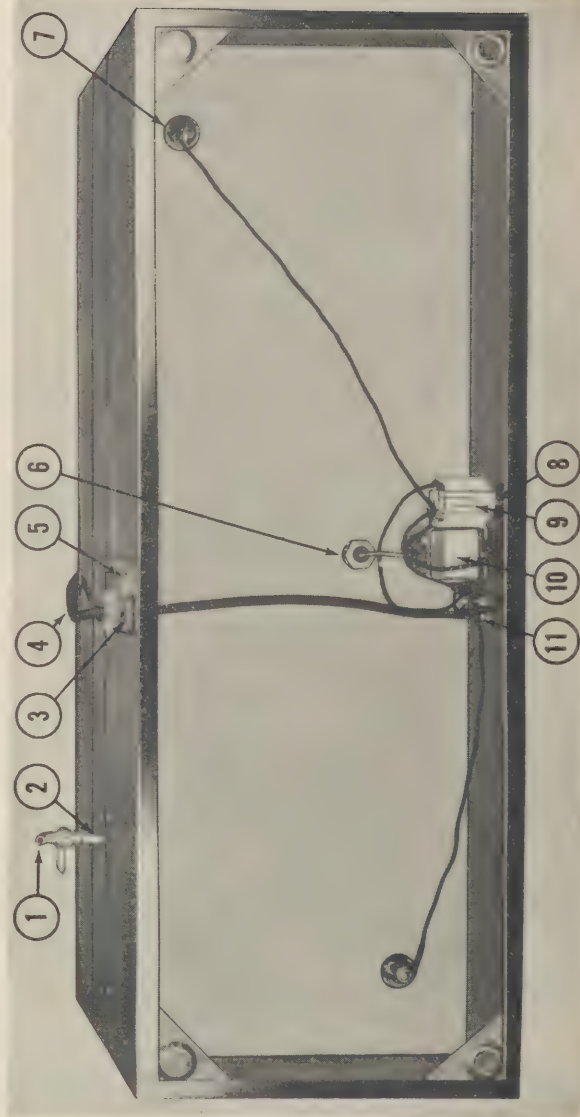


Figure 7. Item No. 4479008, water bath, serological, inactivating, Precision Scientific Co. Bottom view.

	Med. Dept. No.	Nomenclature
1	SR00185	Nut, 8 x 32, Hex, Brass.
2	4R01508	Switch, Control.
3	4R01538	Nut, Thermostat Packing Gland.

	Med. Dept. No.	Nomenclature
4	4R01506	Thermostat, 70°-225°F., Complete. With knob and dial.
5	SR00305	Receptacle, Sign, 650-Watt, 250V., Arrow H&H., 3261. For pilot light.

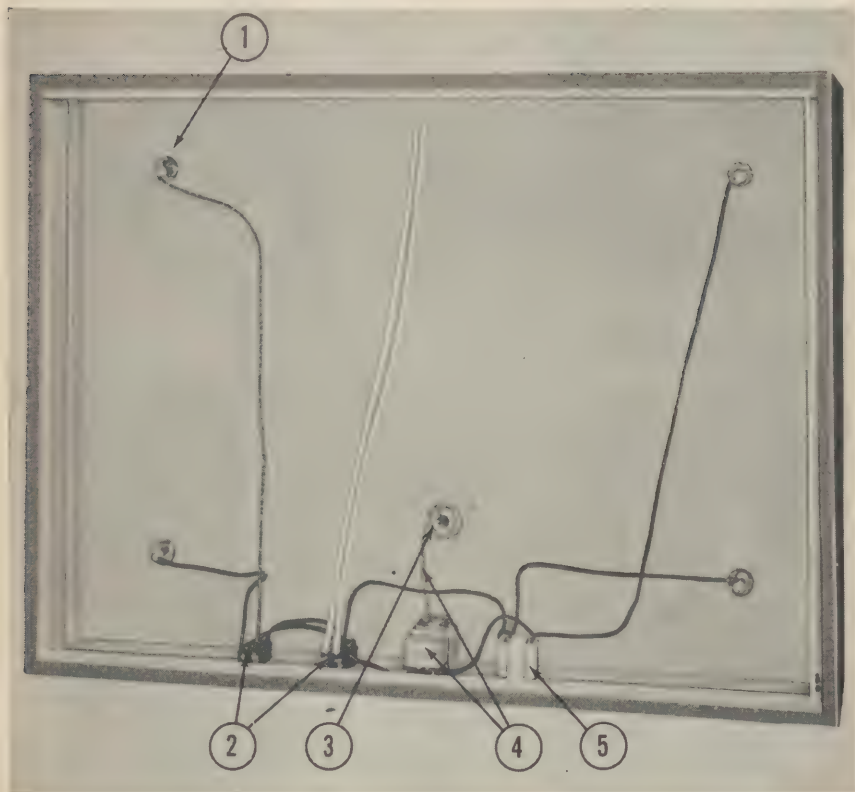


Figure 8. Item No. 4480008, water bath, serological, Wassermann, Precision Scientific Co. Bottom view.

Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature
1 4R01502	Element, Heating, Double Bend, Complete. Assembly.	19 SR00305	Receptacle, Sign, 650 Watt, 250V: Arrow-H&H., 3261. For pilot light.
2 4R01528	Gland, Thermostat Packing, Brass.	20 4R01504	Bulb, Pilot Neon, 1 Watt, 110V.
3 4R01510	Packing, Thermostat, No. 1 Neoprene Stopper.	21 4R01534	Spacer, $\frac{3}{8}$ Inch O.D. x No. 16 Gage Steel $\frac{5}{8}$ Inch Long.
4 4R01540	Washer, Thermostat Packing Gland.	22 4R01536	Clip, Mounting, Thermostat Bulb, Rectangular.
5 4R01538	Nut, Thermostat Packing Gland.	23 SR00306	Screw, No. 6-32 x $1\frac{1}{4}$ Inch, R.H.M., Brass.
6 4R01550	Sleeve, Heater Compression Coupling	24 4R01554	Bracket, Thermometer Holding.
7 4R01552	Nut, Heater Compression Coupling.	25 SR00308	Screw, 2-56 x $\frac{1}{8}$ Inch, R.H.M., Brass.
8 4R01530	Coupling, Compression Heater.	26 SR00340	Screw, 8-32 x $\frac{3}{8}$ Inch, FL. H.M., Brass.
9 SR00017	Nut 8 x 32 Hex.	27 SR00256	Screw, 8-32 x $\frac{5}{16}$ Inch, B.H.M., Brass.
10 SR00303	Washer, Screw Size 10, Brass.	28 4R01506	Thermostat, 70°-225°F., Complete. With knob and dial.
11 4R01531	Washer, Terminal, Heater Element.	29 4R01512	Thermometer, Range 0—70°C.
12 4R01550	Sleeve, Heater Compression Coupling.	30 SR00311	Bibcock, $\frac{1}{8}$ Inch Plain End, Lever Handle.
13 4R01552	Nut, Heater Compression Coupling.	31 4R01556	Well, Thermometer.
14 SR00471	Screw, 6-32 x $\frac{1}{4}$ , B.H.M., Brass.	32 4R01558	Coupling, Thermometer.
15 4R01508	Switch, Control.		
16 4R01546	Clip, Heater Mounting, Rectangular.		
17 SR00026	Plug, Male, Small, Two Prong.		
18 SR00312	Cord, No. 16, Two Conductor, Moisture Resistant, Asbestos Packed.		

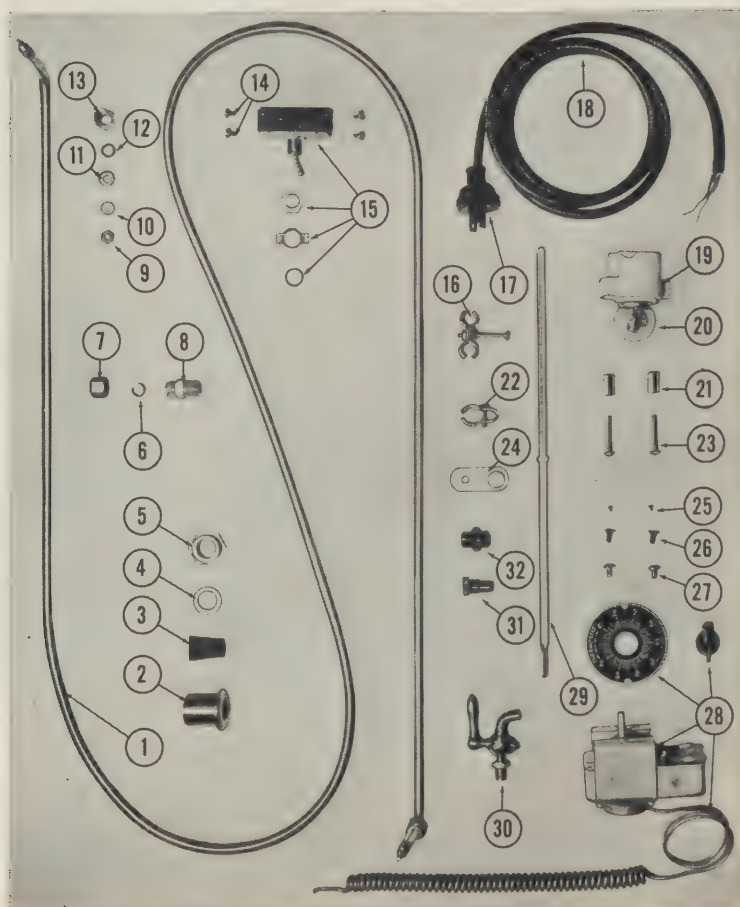


Figure 9. Item No. 4479008, water bath, serological, inactivating, Precision Scientific Co. Identification of parts.

**C.** To replace thermostat. (1) Remove nuts holding the wire leads (found inside box on right end of bath).

(2) Loosen hex nut, found inside the bath on right end.

(3) Pull the thermostat bimetallic bulb through the hole in the right end of the bath.

(4) To reassemble, reverse disassembly procedure.

**D.** To replace switches.

(1) Remove the wire leads by loosening the screws holding them.

(2) Remove knobs from end of switch throw levers.

(3) Remove the four screws holding the switches.

(4) Drop switches from box.

(5) Replace with new switches.

Med. Dept. No.	Nomenclature	Med. Dept. No.	Nomenclature
1 4R01622	Element, Heating, Triple Bend Complete.	12 4R01588	Draincock, $\frac{3}{8}$ Inch.
2 4R01616	Tube, Body, No. 20 Gage, Brass.	13 4R01508	Switch, Control.
3 4R01610	Regulator, Constant Level.	14 4R01536	Clip, Mounting, Thermostat, Bulb.
4 4R01618	Sleeve, Adjusting, Rubber, $\frac{1}{4}$ Inch O.D. x $\frac{1}{32}$ Inch I.D. x $1\frac{1}{2}$ Inch Long.	15 4R01546	Clip, Heater Mounting, Rectangular.
5 4R01512	Thermometer Range 0°-70°C.	16 4R01528	Gland, Thermostat Packing, Brass.
6 4R01558	Coupling, Thermometer.	17 4R01510	Packing, Thermostat, No. 1 Neoprene Stopper.
7 4R01506	Thermostat, 70°-225°F., Complete. With knob and dial.	18 4R01540	Washer, Thermostat Packing Gland.
8 SR00306	Screw, 6-32 x $1\frac{1}{4}$ Inch, R.H.M., Brass.	19 4R01538	Nut, Thermostat Packing Gland.
9 4R01534	Spacer, $\frac{3}{8}$ Inch O.D. x No. 16 Gage Steel, $\frac{5}{8}$ Inch Long.	20 4R01552	Nut, Heater Compression Coupling.
10 4R01504	Bulb, Pilot, Neon, 1 Watt, 110V.	21 4R01550	Sleeve, Heater Compression Coupling.
11 SR00305	Receptacle, Sign, 650 Watt, 250V., Arrow H&H., 326t. For pilot light.	22 SR00302	Washer, Cup, No. 10.
		23 SR00303	Washer, Screw Size 10, Brass.
		24 SR00185	Nut, 8 x 32, Hex Brass.

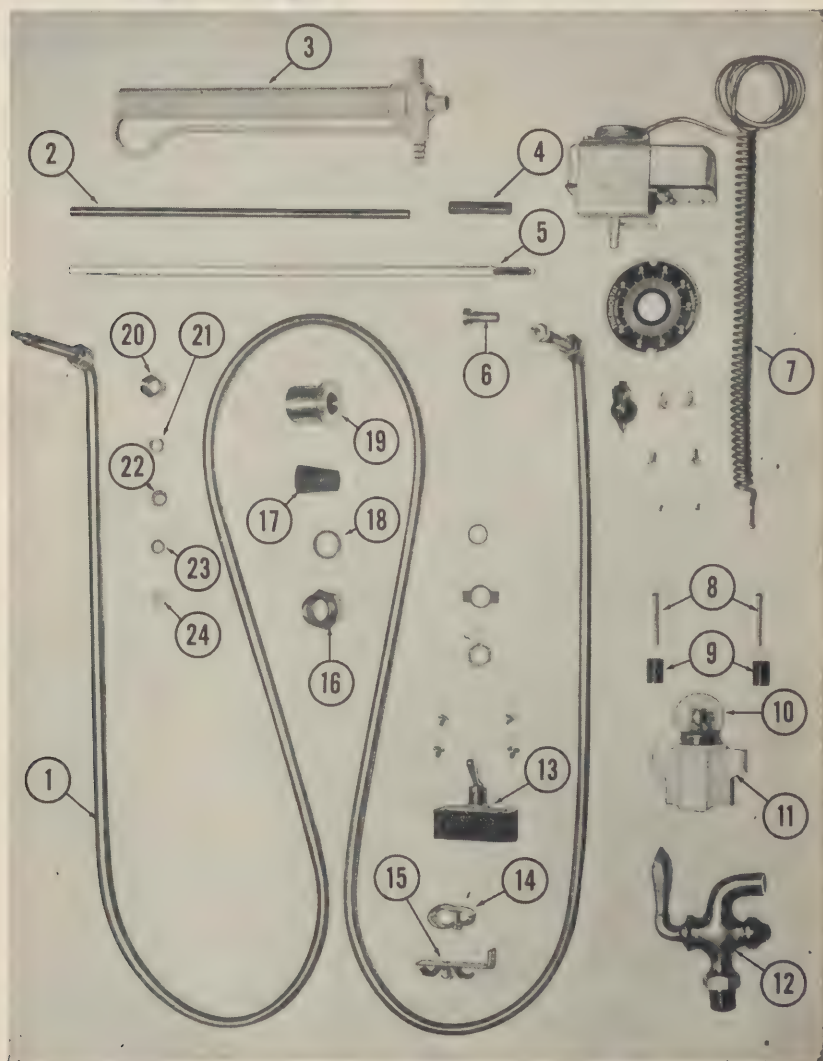


Figure 10. Item No. 4480008, Precision Scientific Co. Identification of parts.

Med. Dept. No.	Nomenclature
1 4R01202	Element, Heating, 110V., Complete.
2 4R01236	Switch, Control, 6 AMP, 250V.
3 4R01238	Switch, Auxiliary, 6 AMP, 125V.
4 SR00057	Bulb, 6 Watt, 115V. Candelabra Base GE., S6.
5 4R01246	Receptacle, Pilot Light.
6 SR00073	Cord, Neoprene, No. 16, Two Conductor.

Med. Dept. No.	Nomenclature
7 SR00026	Plug, Male, Small, Two Prong.
8 4441000	Test Tube, Support Wassermann Rack. Metal.
9 4R01208	Thermometer, Range 5°C.-70°C.
10 4R01206	Thermostat, Single, 110V., Complete. With bimetallic bulb.
11 SR00348	Nut, 8 x 32, Wing.

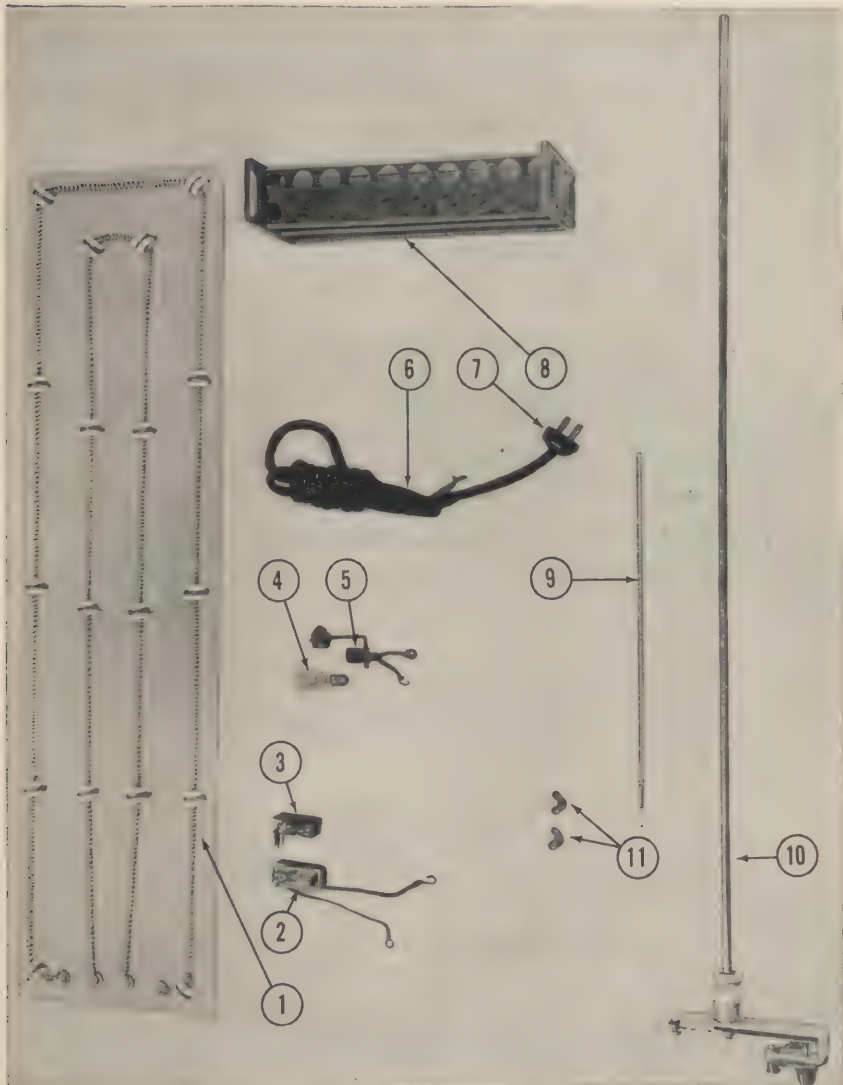


Figure 11. Item No. 4480008, water bath, serological, Wassermann, Gotham Scientific Co.  
Identification of parts.

**APPENDIX.**

**SHIPMENT AND STORAGE**

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**Section I. GENERAL**

1. Prepare the equipment for shipment by performing the following operations:

- a. Remove electrical and plumbing connections.
- b. Remove thermometer, test tube supports, shelves, and the pilot light bulb and bibcock on the Precision equipment and wrap carefully to avoid damage in transit. Special care should be exercised to protect the thermometer.
- c. Pack small items inside the bath using sufficient filler materials to restrict their movement during transit.
- d. Box or crate the equipment to suit requirements of carrier to be used.

**Section II. REFERENCES**

2. References pertaining to the operation, care and maintenance of this equipment include:

MED 7-4479008, Army Service Forces Catalog.  
4480008

TM 8-227, Methods for Laboratory Technicians (and changes). This manual covers the professional techniques of making various laboratory tests.

### Section III. LIST OF ALL SERVICE PARTS

#### 4480008 WATER BATH, SEROLOGICAL, WASSERMANN 110 VOLT, AC-DC PRECISION SCIENTIFIC CO.

Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quan- tity
		<i>Medical Department Items</i>		
2	4441000	TEST TUBE SUPPORT, Wassermann rack. Metal.....	ea.	10
		<i>Common Parts</i>		
*—	SR00035	SCREW, 8-32 x $\frac{1}{16}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00080	WIRE, flamenol, No. 14, stranded, yellow.....	ft.	30
*—	SR00171	SCREW, 8-32 x $\frac{3}{8}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*8, 10	SR00185	NUT, 8 x 32, hex, brass, 144 to pkg.....	pkg.	
*—	SR00249	SCREW, 6 x $\frac{3}{8}$ inch, sheet metal, R.H., 144 to pkg.....	pkg.	
*—	SR00256	SCREW, 8-32 x $\frac{5}{16}$ inch, B.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00273	NUT, 10 x 32, hex, brass, 144 to pkg.....	pkg.	
*10	SR00303	WASHER, screw size 10, brass, 1 lb. pkg., 760 washers.....	pkg.	
*8, 10	SR00305	RECEPTACLE, sign, 650 watt, 250 v., H. & H. No. 3251.....	ea.	1
*10	SR00306	SCREW, 6-32 x $1\frac{1}{4}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00307	SCREW, 6-32 x $\frac{5}{8}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00308	SCREW, 2-56 x $\frac{1}{8}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00339	SCREW, 8-32 x $\frac{1}{2}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	

\*To be requisitioned, when required, from the supply depot.

No asterisk indicates that item is not stocked as a Spare Part, but can be obtained by special requisition.

Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quantity
<i>Common Parts (Contd.)</i>				
*—	SR00340	SCREW, 8-32 x $\frac{3}{8}$ inch, FL.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00350	CONNECTOR, bx $\frac{1}{2}$ inch, squeeze type.....	ea.	1
*—	SR00351	RIVET, 9 x $\frac{1}{4}$ inch, truss head, copper, 1 lb. pkg., 300 rivets.....	pkg.	
*—	SR00352	NUT, cap, 8 x 32, hex, brass, 144 to pkg.....	pkg.	
*—	SR00354	SCREW, $\frac{5}{16}$ -18 x $\frac{1}{2}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00394	WASHER, screw size $\frac{5}{16}$ , brass, 1 lb. pkg., 210 washers.....	pkg.	
*—	SR00471	SCREW, 6-32 x $\frac{1}{4}$ inch, B.H.M., brass, 144 to pkg.....	pkg.	
<i>Uncommon Parts</i>				
*5, 10	4R01502	ELEMENT, heating, double bend, complete..	ea.	1
*10, 2	4R01504	BULB, pilot, neon, 1 watt, 110 v.....	ea.	1
*10, 2	4R01506	THERMOSTAT, 70°-225°F., complete. With knob and dial.....	ea.	1
8, 10, 2	4R01508	SWITCH, control.....	ea.	2
10	4R01510	PACKING, thermostat, No. 1 neoprene stopper.....	ea.	1
10	4R01512	THERMOMETER, range 0°-70°C.....	ea.	1
10	4R01528	GLAND, thermostat packing, brass.....	ea.	1
5	4R01530	COUPLING, compression, heater.....	ea.	4
	4R01531	WASHER, terminal, heater, element.....	ea.	4
10	4R01534	SPACER, $\frac{3}{8}$ inch O.D. x No. 16 gage steel, $\frac{5}{8}$ inch long.....	ea.	2
10	4R01536	CLIP, mounting, thermostat bulb.....	pr.	3
8, 10	4R01538	NUT, thermostat packing gland.....	ea.	1
10	4R01540	WASHER, thermostat packing gland.....	ea.	1
4, 5, 10, 9	4R01546	CLIP, heater mounting, rectangular.....	pr.	2

\*To be requisitioned, when required, from the supply depot.

No asterisk indicates that item is not stocked as a Spare Part, but can be obtained by special requisition.

Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quan- tity
<i>Uncommon Parts (Contd.)</i>				
10	4R01550	SLEEVE, heater compression coupling.....	ea.	4
10	4R01552	NUT, heater compression coupling.....	ea.	4
5	4R01556	WELL, thermometer.....	ea.	1
10	4R01558	COUPLING, thermometer.....	ea.	1
---	4R01566	BODY, outside, front and sides, No. 22 gage steel.....	ea.	1
---	4R01568	BODY, outside, back, No. 22 gage steel.....	ea.	1
---	4R01570	BODY, constant level regulator, brass.....	ea.	1
---	4R01572	BODY, inner, front, bottom and rear, 20 oz. copper.....	ea.	1
---	4R01574	WALL, inner end, 20 oz. copper.....	ea.	2
---	4R01576	PLATE, bottom, No. 16 gage steel.....	ea.	1
---	4R01578	INSULATION, bottom, 34 inches x 25 inches x 1 inch, rigid fiberglass.....	ea.	1
---	4R01580	INSULATION, side, 34 inches x 12 inches x 1 inch, rigid fiberglass.....	ea.	2
---	4R01582	INSULATION, end, 23 inches x 12 inches x 1 inch, rigid fiberglass.....	ea.	2
---	4R01584	SUPPORT, top, 20 oz. copper.....	ea.	2
---	4R01586	TERMINAL, ground, 15 amp.....	ea.	1
10, 2	4R01588	DRAINCOCK, $\frac{3}{8}$ inch.....	ea.	1
---	4R01590	SHELF, 20 oz. copper.....	ea.	1
---	4R01592	STAND, complete, assembly.....	ea.	1
---	4R01594	LEG, $15\frac{1}{2}$ inches x 10 inches x No. 14 gage steel.....	ea.	4
---	4R01596	ANGLE IRON, $32\frac{5}{8}$ inches x 1 inch x 1 inch x $\frac{1}{8}$ inch.....	ea.	2
---	4R01598	ANGLE IRON, $25\frac{11}{16}$ inches x 1 inch x 1 inch x $\frac{1}{8}$ inch.....	ea.	2
---	4R01600	COVER, 20 inches x 28 inches, 16 oz. copper..	ea.	2
2	4R01602	SPUD, constant level regulator, $\frac{3}{8}$ inch.....	ea.	1

Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quan- tity
<i>Uncommon Parts (Contd.)</i>				
—	4R01604	HINGE, cover, brass.....	ea.	4
5, 2	4R01606	CHAIN, 13½ inches long, brass.....	ea.	2
2	4R01608	HANDLE, cover.....	ea.	2
10, 2	4R01610	REGULATOR, constant level.....	ea.	1
—	4R01612	TUBE, overflow, No. 20 gage brass.....	ea.	1
—	4R01614	TUBE, inlet, No. 20 gage brass.....	ea.	1
10	4R01616	TUBE, body, No. 20 gage brass.....	ea.	1
10	4R01618	SLEEVE, adjusting, rubber, ¼ inch O.D. x ½ inch I.D. x 1½ inches long.....	ea.	1
2	4R01620	SPUD, drain, ⅜ inch.....	ea.	1
	4R01622	ELEMENT, heating, triple bend, complete....	ea.	2

4479008 WATER BATH, SEROLOGICAL, INACTIVATING  
110 VOLT, AC-DC  
PRECISION SCIENTIFIC COMPANY

Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quan- tity
		<i>Medical Department Items</i>		
1	4441000	TEST TUBE SUPPORT, Wassermann rack. Metal.....	ea.	10
		<i>Common Parts</i>		
*9	SR00017	NUT, 8 x 32, hex, 144 to pkg.....	pkg.	
*9, 11	SR00026	PLUG, male, small, two prong.....	ea.	1
*—	SR00035	SCREW, 8-32 x $\frac{5}{16}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00171	SCREW, 8-32 x $\frac{3}{8}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00249	SCREW, 6 x $\frac{3}{8}$ inch, sheet metal, R.H., 144 to pkg.....	pkg.	
*—	SR00256	SCREW, 8-32 x $\frac{5}{16}$ inch, B.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00273	NUT, 10 x 32, hex, brass, 144 to pkg.....	pkg.	
*7, 9	SR00303	WASHER, screw size 10, brass, 1 lb. pkg., 760 washers.....	pkg.	
*9	SR00305	RECEPTACLE, sign, 650 watt, 250 v., H. & H. No. 3251.....	ea.	1
*9	SR00306	SCREW, 6-32 x $1\frac{1}{4}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00307	SCREW, 6-32 x $\frac{5}{8}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*9	SR00308	SCREW, 2-56 x $\frac{1}{8}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00310	SCREW, 8-32 x $1\frac{1}{2}$ inch, FL.H.M., brass, 144 to pkg.....	pkg.	
*9	SR00311	BIBCOCK, $\frac{1}{8}$ inch, plain end, lever handle....	ea.	1
*9	SR00312	CORD, No. 16, two conductor, moisture resistant, asbestos packed.....	ft.	6

\*To be requisitioned, when required, from the supply depot.  
No asterisk indicates that item is not stocked as a Spare Part, but can be obtained by special requisition.

Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quan- tity
<i>Common Parts (Contd.)</i>				
*9	SR00340	SCREW, 8-32 x $\frac{3}{8}$ inch, FL.H.M., brass, 144 to pkg.....	pkg.	
*9	SR00471	SCREW, 6-32 x $\frac{1}{4}$ inch, B.H.M., brass, 144 to pkg.....	pkg.	
<i>Uncommon Parts</i>				
*5, 9	4R01502	ELEMENT, heating, double bend, complete, assembly.....	ea.	1
*1, 9	4R01504	BULB, pilot neon, 1 watt, 110 v.....	ea.	1
*4, 5, 1, 9	4R01506	THERMOSTAT, 70°-225°F., complete. With knob and dial.....	ea.	1
*1, 7, 9	4R01508	SWITCH, control.....	ea.	1
*9	4R01510	PACKING, thermostat, No. 1 neoprene stopper.....	ea.	1
*1, 9, 2-B, 2-A	4R01512	THERMOMETER, range 0°-70°C.....	ea.	1
—	4R01514	JACKET, outside body, No. 22 gage steel, chrome plate.....	ea.	1
—	4R01516	JACKET, inside body, 14 oz. copper.....	ea.	1
—	4R01518	JACKET, inside, end, 14 oz. copper.....	ea.	2
—	4R01520	RETAINER, bottom insulation, No. 24 gage galvanized.....	ea.	1
—	4R01522	INSULATION, bottom 34½ inch x 12 inch x $\frac{3}{4}$ inch, rigid fiberglass.....	ea.	1
—	4R01524	INSULATION, end, 10½ inch x 6¾ inch x $\frac{3}{4}$ inch, rigid fiberglass.....	ea.	2
—	4R01526	INSULATION, side, 34½ inch x 6¾ inch x $\frac{3}{4}$ inch, rigid fiberglass.....	ea.	2
5, 9	4R01528	GLAND, thermostat packing, brass.....	ea.	1
5, 9	4R01530	COUPLING, compression, heater.....	ea.	2
9	4R01531	WASHER, terminal, heater, element.....	ea.	2
7	4R01532	SPUD, $\frac{1}{8}$ inch, drain.....	ea.	1
7, 9	4R01534	SPACER, $\frac{3}{8}$ inch O.D. x No. 16 gage steel, $\frac{5}{8}$ inch long.....	ea.	2

\*To be requisitioned, when required, from the supply depot.

No asterisk indicates that item is not stocked as a Spare Part, but can be obtained by special requisition.

Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quan- tity
<i>Uncommon Parts (Contd.)</i>				
4, 5, 9	4R01536	CLIP, mounting, thermostat bulb, rectan- gular.....	pr.	3
9	4R01538	NUT, thermostat packing gland.....	ea.	1
9	4R01540	WASHER, thermostat packing gland.....	ea.	1
7	4R01542	CONNECTOR, cord.....	ea.	1
7	4R01544	TERMINAL, ground, 25 amp.....	ea.	1
4, 5, 9	4R01546	CLIP, heater mounting, rectangular.....	pr.	2
—	4R01548	SHELF, 16 oz. copper.....	ea.	1
9	4R01550	SLEEVE, heater compression coupling.....	ea.	2
4, 9	4R01552	NUT, heater compression coupling.....	ea.	2
4, 9	4R01554	BRACKET, thermometer holding.....	ea.	1
1, 4, 9	4R01556	WELL, thermometer.....	ea.	1
9	4R01558	COUPLING, thermometer.....	ea.	1
—	4R01560	RETAINER, cover, back, 32 oz. copper.....	ea.	1
—	4R01562	RETAINER, cover, front, 32 oz. copper.....	ea.	1
1	4R01564	COVER, gable .090 clear polystyrene.....	ea.	10

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Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quan- tity
		<i>Medical Department Items</i>		
11	4441000	TEST TUBE SUPPORT, Wassermann rack. Metal.....	ea.	20
		<i>Common Parts</i>		
*—	SR00010	SCREW, 8-32 x $\frac{3}{8}$ inch, R.H.M., 144 to pkg.	pkg.	
*—	SR00017	NUT, 8 x 32, hex, 144 to pkg.....	pkg.	
*11	SR00026	PLUG, male, small, two prong.....	ea.	1
*11	SR00057	BULB, 6 watt, 115 v., candelabra base, G.E. S-6.....	ea.	1
*11	SR00073	CORD, neoprene, No. 16, two conductor.....	ft.	6
*—	SR00114	SCREW, 8-32 x $\frac{3}{4}$ inch, R.H.M., 144 to pkg.	pkg.	
*—	SR00117	SCREW, 8-32 x $1\frac{1}{4}$ inch, R.H.M., 144 to pkg.....	pkg.	
*—	SR00151	WASHER, lock, screw size 10, 1,000 to pkg.	pkg.	
*—	SR00171	SCREW, 8-32 x $\frac{3}{8}$ inch, R.H.M., brass, 144 to pkg.....	pkg.	
*6	SR00185	NUT, 8 x 32, hex, brass, 144 to pkg.....	pkg.	
*—	SR00265	SCREW, 8-32 x $\frac{5}{8}$ inch, R.H.M., 144 to pkg.	pkg.	
*—	SR00294	WASHER, shakeproof, screw size 8, int., 1,000 to pkg.....	pkg.	
*—	SR00328	WASHER, screw size 8, brass, 1 lb. pkg., 725 washers.....	pkg.	
*—	SR00340	SCREW, 8-32 x $\frac{3}{8}$ inch, FL.H.M., brass, 144 to pkg.....	pkg.	
*—	SR00341	SCREW, 10-24 x $\frac{1}{2}$ inch, R.H.M., 144 to pkg.....	pkg.	
*—	SR00342	SCREW, 8 x $\frac{3}{8}$ inch, O.H. wood, 144 to pkg.	pkg.	
*—	SR00343	SCREW, 4 x $\frac{1}{2}$ inch, B.H. wood, 144 to pkg.	pkg.	
*—	SR00344	SCREW, 6-32 x $\frac{1}{8}$ inch, B.H.M., brass, 144 to pkg.....	pkg.	

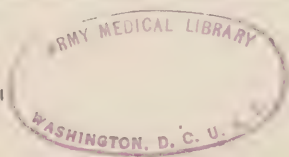
\*To be requisitioned, when required, from the supply depot.

No asterisk indicates that item is not stocked as a Spare Part, but can be obtained by special requisition.

Fig. No.	Medical Dept. No.	Nomenclature	Unit	Quantity
<i>Common Parts (Contd.)</i>				
*—	SR00346	NUT, 10 x 24, square, 144 to pkg.....	pkg.	
*—	SR00347	NUT, 6 x 32, hex, brass, 144 to pkg..	pkg.	
*11	SR00348	NUT, 8 x 32, wing, 100 to pkg.....	pkg.	
<i>Uncommon Parts</i>				
*11	4R01202	ELEMENT, heating, 110 v., complete .....	ea.	1
*6, 11	4R01206	THERMOSTAT, single, 110 v., complete. With bimetallic bulb.....	ea.	1
*3	4R01208	THERMOMETER, range 5°-70°C.....	ea.	1
—	4R01210	SCREW, 4 x ½ inch, R.H.M.....	ea.	6
—	4R01212	NUT, 4 x 36, hex, brass.....	ea.	2
—	4R01214	LID, copper.....	ea.	2
6	4R01216	SUPPORT, lid.....	ea.	2
3	4R01218	HINGE, lid.....	ea.	4
3	4R01220	HANDLE, lid.....	ea.	2
—	4R01222	INSULATION, side, asbestos board .....	ea.	2
—	4R01224	INSULATION, side, corrugated asbestos.....	ea.	2
—	4R01226	INSULATION, end, asbestos board.....	ea.	2
—	4R01228	INSULATION, end, corrugated asbestos.....	ea.	2
—	4R01230	INSULATION, bottom, asbestos board.....	ea.	3
—	4R01232	INSULATION, bottom, corrugated asbestos.....	ea.	2
6	4R01234	SHELF, copper.....	ea.	2
3	4R01236	SWITCH, control, 6 amp, 250 v.....	ea.	1
3	4R01238	SWITCH, auxiliary, 6 amp, 125 v.....	ea.	1
3	4R01240	WELL, thermometer.....	ea.	1
3	4R01242	DRAINCOCK, ¾ inch.....	ea.	1
3	4R01244	STAND, angle iron.....	ea.	1
11	4R01246	RECEPTACLE, pilot light.....	ea.	1

\*To be requisitioned, when required, from the supply depot.

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